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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,216	10/16/2000	KNUD ERIK BAEKGAARD	740119-98	8804
22204	7590	05/07/2004		
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			EXAMINER: GRIER, LAURA A	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 05/07/2004

18

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/688,216		<b>Applicant(s)</b> BAEKGAARD ET AL.	
	<b>Examiner</b> Laura A Grier		<b>Art Unit</b> 2644	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☐ Responsive to communication(s) filed on 15 January 2004.

2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.

    4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☒ Claim(s) 5, 10 and 13-20 is/are allowed.

6) ☒ Claim(s) 1, 3, 4, 9, 11 and 12 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_

4) ☐ Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: \_\_\_\_\_

*Specification*

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. The hyperlink is cited on page 4, lines 3-4 and page 12, line 2. See MPEP § 608.01.

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2. The indicated allowability of claim 4 and 13 is withdrawn.

*Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites "A/B comparison", the exact meaning of an "A/B comparison" has not been disclosed in the specification. The provided examination in the specification only explained a simple comparison between a filter and unfiltered signal.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 2644

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**6. Claims 1, 4, 6, 9, and 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harley in view of Hower, U. S. Patent No. 4534058.

Regarding **claim 1**, Harley discloses an active noise control stethoscope (figures 1-4).

Harley's disclosure comprises a sensor means, which inherently teaches a vibration transducer as evident by the fact that sensor detects body sounds (vibrations, etc.) and converts the sound into electrical signals (col. 10, lines 55-60); a headset (13), which constitutes as headphones; a FIR filter for providing amplification (col. 10, lines 10-12); and a digital filter (col. 7, lines 5-27), wherein the electric stethoscope provides an acoustic output; and as well a noise control stethoscope constitutes as a type of acoustic stethoscope. However, Harley fails to specifically disclose a pre-emphasis filter means. The examiner maintains that such a filter was well known in the art.

Regarding the filter, in a similar field of endeavor, Hower discloses electronic a stethoscope that includes a filter integrated with an amplifier (abstract and col. 1, lines 32-41), which reads a pre-emphasis filter means.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Harley by incorporating a filter as taught by Hower for the purpose of removing unwanted frequencies (high frequencies and amplifying low frequencies from a range of 25 to 150-200Hz for the purpose of providing superior noise rejection as taught by Hower.

Regarding **claim 9**, Harley and Hower discloses everything claimed as applied above (see claim 1). Harley further discloses support providing automatic amplification control (col. 10, lines 25-30).

Regarding **claim 11**, Harley and Hower discloses everything claimed as applied above (see claim 1). Harley further discloses the headphone arrangement with transducer fitted in an immediate proximity of the ear canal of each ear (figure 1 and col. 5, lines 46-51).

Regarding **claim 12**, Harley and Hower discloses everything claimed as applied above (see claim 1). Harley further discloses means of providing adequate compensation (col. 9, lines 63-67 and col. 10, lines 25-46).

7. Regarding **claim 4**, Harley discloses an active noise control stethoscope (figures 1-4). Harley's disclosure comprises a sensor means, which inherently teaches a vibration transducer as evident by the fact that sensor detects body sounds (vibrations, etc.) and converts the sound into electrical signals (col. 10, lines 55-60); a headset (13), which constitutes as headphones; a FIR filter for providing amplification (col. 10, lines 10-12); and a digital filter (col. 7, lines 5-27), wherein the electric stethoscope provides an acoustic output; and as well a noise control stethoscope constitutes as a type of acoustic stethoscope. However, Harley fails to specifically disclose a pre-emphasis filter means. The examiner maintains that such a filter was well known in the art.

Regarding the filter, in a similar field of endeavor, Hower discloses electronic a stethoscope that includes a filter integrated with an amplifier (abstract and col. 1, lines 32-41), which reads a pre-emphasis filter means.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Harley by incorporating a filter as taught by Hower for the purpose of removing unwanted frequencies (high frequencies and amplifying low frequencies from a range of 25 to 150-200Hz for the purpose of providing superior noise rejection as taught by Hower.

Further, Harley and Hower, fails to disclose the use of an amplifier and the use of multiple headphones with an amplifier. The use of an amplifier and various headphones being used by the same amplifier is commonly known in the art. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Harley and Hower by implement an amplifier adaptable to various types of headphones for the convenience of interchanging a headphone as needed for the desired audio quality.

***Allowable Subject Matter***

8. Claims 5, 10 and 13-20 allowed.
9. Claim 3 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
10. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Murphy, U. S. Patent No. 6219424 discloses an electronic stethoscope amplifier.

### *Response to Arguments*

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12. Applicant's arguments filed 12/4/03 have been fully considered but they are not persuasive.

In view of the applicant's arguments submitted regarding claims 5 and 6, the rejection has been removed. However, the argument relevant to claim 1 is not persuasive in view of the amended the changed. The amended fails to further limit the claim. The frequency range of the filter taught Hower discloses a range that reads on "... throughout the range of from about 20 Hz to about 3000 Hz). Thus the rejection is maintained. Regarding the applicant's argument concerning claim 11, the claim language is limiting to the exact meaning of "fitted in immediate proximity to the ear canal" as explained in the arguments. Immediate proximity is interpreted to broadly. Thus the rejection is maintained.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Application/Control Number: 09/688,216  
Art Unit: 2644

Page 7

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

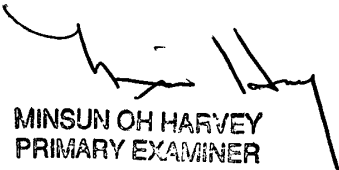
**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG

May 3, 2004

  
MINSUN OH HARVEY  
PRIMARY EXAMINER